AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the present application.

Listing of Claims:

Claim 1 (currently amended): A Group III nitride semiconductor crystal manufacturing method, comprising:

a step of growing at least [[one]] two Group III nitride semiconductor crystals on a starting substrate; and

a step of separating said Group III nitride semiconductor crystals from said starting substrate; characterized in that

said Group III nitride semiconductor crystals [[is]] each are 10 μm or more but 600 μm or less in thickness, and [[is]] each are 0.2 mm or more but 50 mm or less in width.

Claim 2 (currently amended): The Group III nitride semiconductor crystal manufacturing method recited in claim 1, characterized in that the principal faces of said Group III nitride semiconductor crystals together are [[is]] smaller in area than the principal face of said starting substrate.

Claim 3 (currently amended): The Group III nitride semiconductor crystal manufacturing method recited in claim 1, characterized in that said step of growing at least [[one]] two said Group III nitride semiconductor crystals includes:

a step of forming on said starting substrate a mask layer having at least [[one]] two windows; and

a step of growing each said Group III nitride semiconductor crystal at least on an open surface of said starting substrate below a respective one of said windows in said mask layer.

Claim 4 (currently amended): The Group III nitride semiconductor crystal manufacturing method recited in claim 3, characterized in that said windows [[is]] each are formed from a group composed of at least two micro-apertures.

Claim 5 (currently amended): The Group III nitride semiconductor crystal manufacturing method recited in claim 1, characterized in that said step of growing at least [[one]] two said Group III nitride semiconductor crystals includes:

a step of disposing at least [[one]] two seed crystals on said starting substrate; and

a step of growing said Group III nitride semiconductor crystals with said seed crystals as [[its]] their respective nuclei~~us~~.

Claim 6 (currently amended): The Group III nitride semiconductor crystal manufacturing method recited in claim 1, characterized in that whichever of an etching, lasing, or cleaving method is used in said step of separating from said starting substrate said Group III nitride semiconductor crystals.

Claim 7 (currently amended): The Group III nitride semiconductor crystal manufacturing method recited in claim 1, characterized in that the conformation of said Group III nitride semiconductor crystals is hexagonal-platelike, rectangular-platelike, or triangular-platelike.

Claim 8 (currently amended): The Group III nitride semiconductor crystal manufacturing method recited in claim 1, characterized in that said Group III nitride

semiconductor crystals [[is]] are grown at a rate of at least 10 μm/hr but not more than 300 μm/hr.

Claim 9 (currently amended): The Group III nitride semiconductor crystal manufacturing method recited in claim 1, characterized in that said Group III nitride semiconductor crystals [[has]] have an impurity concentration that is not more than 5×10^{19} cm^{-3}.

Claim 10 (currently amended): The Group III nitride semiconductor crystal manufacturing method recited in claim 1, characterized in that an off angle between the principal face of said Group III nitride semiconductor crystals and whichever of [[its]] their (0001) face, $(1\bar{1}00)$ face, $(11\bar{2}0)$ face, $(1\bar{1}01)$ face, $(1\bar{1}02)$ face, $(11\bar{2}1)$ face, or $(11\bar{2}2)$ is 0° or more but not more than 4°.

Claim 11 (withdrawn): A Group III nitride semiconductor crystal manufactured using a Group III nitride semiconductor crystal manufacturing method recited in claim 1.

Claim 12 (currently amended): A method of manufacturing a Group III nitride semiconductor device, comprising:

a step of growing at least [[one]] two Group III nitride semiconductor crystal substrates of semiconductor-device-scale dimension on a starting substrate;

a step of growing at least one Group III nitride semiconductor crystal layer on each said Group III nitride semiconductor crystal substrate; and

a step of separating from said starting substrate [[a]] Group III nitride semiconductor crystals that [[is]] are constituted by said Group III nitride

semiconductor crystal substrates and said Group III nitride semiconductor crystal layers; characterized in that

said Group III nitride semiconductor crystals [[is]] each are 10 μm or more but 600 μm or less in thickness, and [[is]] each are 0.2 mm or more but 50 mm or less in width.

Claim 13 (currently amended): The method of manufacturing a Group III nitride semiconductor device recited in claim 12, characterized in that the principal faces of said Group III nitride semiconductor crystal substrates together are [[is]] made smaller in area than the principal face of said starting substrate.

Claim 14 (currently amended): The method of manufacturing a Group III nitride semiconductor device recited in claim 12, characterized in that said step of growing at least [[one]] two said Group III nitride semiconductor crystal substrates includes:

a step of forming on said starting substrate a mask layer having at least [[one]] two windows; and

a step of growing each said Group III nitride semiconductor crystal substrate at least on an open surface of said starting substrate below a respective one of said windows in said mask layer.

Claim 15 (currently amended): The method of manufacturing a Group III nitride semiconductor device recited in claim 14, characterized in that said windows [[is]] each are formed from a group composed of at least two micro-apertures.

Claim 16 (currently amended): The method of manufacturing a Group III nitride semiconductor device recited in claim 12, characterized in that said step of

growing at least [[one]] two said Group III nitride semiconductor crystal substrates includes:

a step of disposing at least [[one]] two seed crystals on said starting substrate; and

a step of growing said Group III nitride semiconductor crystal substrates with said seed crystals as [[its]] their respective nucleius.

Claim 17 (currently amended): The method of manufacturing a Group III nitride semiconductor device recited in claim 12, characterized in that whichever of an etching, lasing, or cleaving method is used in said step of separating from said starting substrate said Group III nitride semiconductor crystal constituted by said Group III nitride semiconductor crystal substrates and said Group III nitride semiconductor crystal layers.

Claim 18 (currently amended): The method of manufacturing a Group III nitride semiconductor device recited in claim 12, characterized in that the conformation of said Group III nitride semiconductor crystal substrates and said Group III nitride semiconductor crystal layers is hexagonal-platelike, rectangular-platelike, or triangular-platelike.

Claim 19 (currently amended): The method of manufacturing a Group III nitride semiconductor device recited in claim 12, characterized in that said Group III nitride semiconductor crystal substrates [[is]] are grown at a rate of at least 10μm/hr but not more than 300 μm/hr.

Claim 20 (currently amended): The method of manufacturing a Group III nitride semiconductor device recited in claim 12, characterized in that said Group III

nitride crystal substrates [[has]] have an impurity concentration that is not more than 5×10^{19} cm^{-3}.

Claim 21 (currently amended): The method of manufacturing a Group III nitride semiconductor device recited in claim 12, characterized in that an off angle between the principal face of said Group III nitride crystal substrates and whichever of [[its]] their (0001) face, $(1\bar{1}00)$ face, $(11\bar{2}0)$ face, $(1\bar{1}01)$ face, $(1\bar{1}02)$ face, $(11\bar{2}1)$ face, or $(11\bar{2}2)$ face is 0° or more but not more than 4°.

Claim 22 (withdrawn): A Group III nitride semiconductor device manufactured using a method of manufacturing a Group III nitride semiconductor device recited in claim 12.

Claim 23 (withdrawn): The Group III nitride semiconductor device recited in claim 22, characterized in that a roughened surface is formed in on the back side of said Group III nitride semiconductor crystal substrate.

Claim 24 (withdrawn): The Group III nitride semiconductor device recited in claim 23, characterized in that the surface roughness R_{P-V} of said roughened surface formed on the back side of said Group III nitride semiconductor crystal substrate is at least 0.01 μm but not more than 50 μm.

Claim 25 (withdrawn): A light-emitting appliance comprising a Group III nitride semiconductor device recited in claim 22, characterized in that:

said Group III nitride semiconductor device is furnished with said Group III nitride semiconductor crystal substrate, an *n*-type Group III nitride semiconductor layer on a first principal face side of said Group III nitride semiconductor crystal substrate, a *p*-type Group III nitride semiconductor crystal layer located farther from

said Group III nitride semiconductor substrate than is said *n*-type Group III nitride semiconductor crystal layer, and a light-emitting layer that is located between said *n*-type Group III nitride semiconductor crystal layer and said *p*-type Group III nitride semiconductor crystal layer;

said Group III nitride semiconductor crystal substrate has a resistivity of 0.5 Ω·cm or less; and

said *p*-type Group III nitride semiconductor crystal layer side is mounted down, and light is irradiated from a second principal face, being the principal face on the side of said Group III nitride semiconductor crystal substrate opposite said first principal face.

Claim 26 (withdrawn): A light-emitting appliance comprising a Group III nitride semiconductor device recited in claim 22, characterized in that:

said Group III nitride semiconductor device is furnished with a GaN substrate being said Group III nitride semiconductor crystal substrate, an *n*-type $Al_xGa_{1-x}N$ layer ($0 \leq x \leq 1$), being an *n*-type Group III nitride semiconductor layer, on a first principal face side of said GaN substrate, a *p*-type $Al_xGa_{1-x}N$ layer ($0 \leq x \leq 1$), being a *p*-type Group III nitride semiconductor crystal layer, located farther from said GaN substrate than is said *n*-type $Al_xGa_{1-x}N$ layer, and a light-emitting layer located between said *n*-type $Al_xGa_{1-x}N$ layer and said *p*-type $Al_xGa_{1-x}N$ layer;

the dislocation density of said GaN substrate is not more than $10^8/cm^2$; and

said *p*-type $Al_xGa_{1-x}N$ layer side is mounted down, and light is irradiated from a second principal face, being the principal face on the side of said GaN substrate opposite said first principal face.

Claim 27 (withdrawn): A light-emitting appliance comprising a Group III nitride semiconductor device recited in claim 22, characterized in that:

said Group III nitride semiconductor device is furnished with a AlN substrate being said Group III nitride semiconductor crystal substrate, an *n*-type $Al_xGa_{1-x}N$ layer ($0 \leq x \leq 1$), being an *n*-type Group III nitride semiconductor layer, on a first principal face side of said AlN substrate, a *p*-type $Al_xGa_{1-x}N$ layer ($0 \leq x \leq 1$) being a *p*-type Group III nitride semiconductor crystal layer located farther from said AlN substrate than is said *n*-type $Al_xGa_{1-x}N$ layer, and a light-emitting layer located between said *n*-type $Al_xGa_{1-x}N$ layer and said *p*-type $Al_xGa_{1-x}N$ layer;

the thermal conductivity of said GaN substrate 100 W/(m·K) or more; and

said *p*-type $Al_xGa_{1-x}N$ layer side is mounted down, and light is irradiated from a second principal face, being the principal face on the side of said AlN substrate opposite said first principal face.